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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,718	01/26/2004	Rustem F. Ismagilov	7814-95	2568
757 7590 08/21/2009 BRINKS HOFER GILSON & LIONE P.O. BOX 10395			EXAMINER	
			GAKH, YELENA G	
CHICAGO, IL 60610			ART UNIT	PAPER NUMBER
			1797	
			MAIL DATE	DELIVERY MODE
			08/21/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)	
10/765,718	ISMAGILOV ET AL.	
Examiner	Art Unit	

have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for repty originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any repty received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  NOTICE OF APPEAL    The Notice of Appeal was filed on		
1. ☑ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must intelly file one of the following replies: (1) an amendment, affadix, or other avidance, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:  a) ☐ The period for reply expiresmonths from the malling date of the final rejection.  Examinor Note: If box is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS for The FinAlk REJECTION. See MFEP 708.07(1).  Extensions of time may be obtained under 37 CFR 1.198(a). The date on which the petition under 37 CFR 1.138(a) and the appropriate extension fee number 37 CFR 1.178(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; (c) as any reduce any semior part and part and the shortened statutory period for reply originally set in the final office action; (c) as any reduce any semior part plant of the shortened statutory period for reply originally set in the final office action; (c) as any reduce any semior part plant of the shortened statutory period for reply originally set in the final office action; (c) as any reduce any semior part plant of the shortened statutory period for reply originally set in the final office action; (c) as a construction of the shortened statutory period for reply originally set in the final office action; (c) as a construction of the shortened statutory period for reply originally set in the final office action; (c) as a construction of the shortened statutory period for reply originally set in the final office action; (c) as a construction of the shortened statutory period for reply originally set in the final office	The MAILING DATE of this communication appears on the cover sheet with the correspondence address	
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a) The period for reply expiresmonths from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of the Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  Examer Note: If box 1 is checked, check citier box (a) or (b), ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706 (07()).  Extensions of time may be obtained under 37 CFR 1.136(a) The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee was forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, over if timely filed, may reduce any amend patent term adjustment. See 37 CFR 1.704(b).  NOTICE OF APPEAL  2. The Notice of Appeal was filed on	1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time	
<ul> <li>2. ☐ The Notice of Appeal was filed on A brief in compliance with 37 CFR 41.37 (a)), to avoid dismissal of the date of filing the Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).</li> <li>AMENDMENTS</li> <li>3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);</li> <li>(b) ☐ They raise the issue of new matter (see NOTE below);</li> <li>(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or</li> <li>(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.</li> <li>NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).</li> <li>4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).</li> <li>5. ☐ Applicant's reply has overcome the following rejection(s):</li></ul>	a) The period for reply expiresmonths from the mailing date of the final rejection.  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).  Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).	0
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	/Yelena G. Gakh/	

Continuation of 3. NOTE: claims 83 and 84 are new and require further examination.

Continuation of 11. does NOT place the application in condition for allowance because: the Applicants argue that the combination of Weigl and Chayen is not obvious for a person of ordinary skill in the art. Even if taking the position of the Applicants, the secondary references of Shaw, Lemaitre or Torkelli are teaching performing reactions in the microchannels in the same way as it is done for crystallization of the instant invention, with a direct analogy between chemical reactions and physical process of crystallization drawn by the Applicants themselves throughout the specification.

According to the Applicants' definition:

"The term "reaction" refers to a physical, chemical, biochemical, or biological transformation that involves at least one chemical, e.g., reactant, reagent, phase, carrier-fluid, or plug-fluid and that generally involves (in the case of chemical, biochemical, and biological transformations) the breaking or formation of one or more bonds such as covalent, noncovalent, van der Waals, hydrogen, or ionic bonds. The term includes typical chemical reactions such as synthesis reactions, neutralization reactions, decomposition reactions, displacement reactions, reduction-oxidation reactions, precipitation, CRYSTALLIZATION, combustion reactions, and polymerization reactions, as well as covalent and noncovalent binding, phase change, color change, phase formation, CRYSTALLIZATION, dissolution, light emission, changes of light absorption or emissive properties, temperature change or heat absorption or emission, conformational change, and folding or unfolding of a macromolecule such as a protein." (Pages 16-17 of the specification).

Furthermore, Chayen specifically indicates advantages of performing crystallization in small well controlled volumes. The examiner is not quite sure, why the plugs, which are surrounded by the carrier fluid (since there is at least a monomolecular layer of the carrier fluid between the plugs and the microchannel walls) are different from the droplets surrounded by the oil, except for the droplets are hanging rather than moving. These Applicants' arguments do not seem to be persuasive.